

REMARKS

Reconsideration is respectfully requested.

Status of the Claims

Claims 1-47 are pending. Because claims 3-10, 15-19, and 24-47 have been withdrawn from consideration, only claims 1, 2, 11-14, and 20-23 are at issue.

Claims 1 and 2 have been amended to recite compounds of the present invention. Support for these amendments can be found, for example, in the claims as originally filed and the Specification at page 5, lines 2-6. No new matter has been added to the application.

Claim Rejections – 35 U.S.C. § 112

Claims 1, 2, 11-14, and 20-23 remain rejected under 35 U.S.C. § 112, first paragraph, because the specification allegedly lacks enablement for analogs, tautomers, solvates, prodrugs, and stereoisomers of the present compounds.

Claim 1 has been amended to specify that the recited compound is isolated from an ascidian, thereby indicating the starting material for the claimed compound. “Prodrugs” and “analogs” have been deleted from the claims. Optional substitutions that may be expected are recited.

Therefore, as amended, claim 1 refers to compounds isolated from an ascidian and certain derivatives that the skilled artisan may expect to find through the extraction process. *See* Specification at pages 4-8. The Specification describes processes for extracting the claimed compounds from an ascidian. The skilled artisan would appreciate that in addition to the compound of formula 1, certain derivatives may be obtained, such as those created during the extraction process (e.g., salts and solvates).

Additionally, stereoisomers, tautomers, and pharmaceutically acceptable solvates are well-known and understood classes of derivatives that are frequently claimed in pharmaceutical inventions. *See, e.g.*, U.S. Patent No. 6,617,335 (claiming an alkaloid and its stereoisomers, tautomers, and solvates without further disclosure of how to make them). Furthermore, the specification, in fact, provides specific guidance as to how to make the claimed stereoisomers and examples of pharmaceutically acceptable solvates. “Additionally, modification of the stereochemistry of the above formulas is also within the skill of those in the art. For example, at C1 to C10 and from N1’ to N9’ and stereochemistry at C-4’ can be either R- or S-.” (Specification at page 6, lines 6-8.). “The structures of 1-20 illustrated in Figure 2 above are capable of forming pharmaceutically acceptable ... solvates, such as hydrates and alcoholates.” (Specification at page 6, lines 13-15.) Tautomers are “structural isomers that exist in equilibrium and are readily converted from one isomeric form to another.” (“Tautomer,” Columbia Electronic Encyclopedia, 2007, *available at* <http://columbia.thefreedictionary.com/Tautomer>.). Where the principal compound is one isomer, its corresponding tautomeric isomer will naturally be present. The skilled artisan would readily appreciate this fact.

Claim 2 has been amended to delete “tautomers,” “stereoisomers,” “analogs,” “anhydrides,” “prodrugs,” and “solvates.” Accordingly, the rejection is moot as to claim 2.

In an Advisory Action dated October 19, 2007, the Examiner quotes language related to the inefficiencies of organic synthesis research. The Examiner’s evidence regarding synthesis of derivatives is no longer applicable because the derivatives in the amended claims are only obtained by isolation from an ascidian.

For the above reasons, the Specification enables the skilled artisan to make and use the claimed compounds. It is respectfully requested that the rejection be withdrawn.

